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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,597	01/18/2002	Lothar Finzel	44316/242361	3095

7590

10/03/2002

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EXAMINER

MAYO, TARA L

ART UNIT

PAPER NUMBER

3671

DATE MAILED: 10/03/2002

FL

Please find below and/or attached an Office communication concerning this application or proceeding.



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07/31/2002

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**Office Action Summary**

Application No.

10/051,597

Applicant(s)

FINZEL ET AL.

Examiner

Tara L. Mayo

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 123-168 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 144-160 is/are allowed.
- 6) ☒ Claim(s) 123-143 and 161-167 is/are rejected.
- 7) ☒ Claim(s) 168 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 5
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 123 through 143, 166, and 167 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3671

In claim 123 on lines 6 through 7, “not previously evacuated to form the channel” renders the scope of the claimed invention unclear. Specifically, Applicants fail to previously recite any method or manner of forming the channel.

With regard to claim 166, the scope of the claimed invention is indefinite as it is not clear whether or not “a duct” is related to the previously recited “at least one lengthwise extending duct” of claim 161.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 161, 165, and 166 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaylin (U.S. Patent No. 4,896,997).

Gaylin ‘997, as seen in Fig. 5, discloses a fiber optic installation (col. 1, lines 6 through 13) comprising:

an elongate body (30) defining at least one lengthwise extending duct (24) and adapted to be disposed within a channel (85) defined by a surface (13);

at least one optical waveguide (26) disposed within a respective duct defined by said elongate body; and

Art Unit: 3671

a filling material overlying said elongate body and at least partially filling the channel (col. 4, lines 50 through 52);

wherein said elongate body is sheathed by said filling material; and

wherein said elongate body defines a slot opening (30a) into the at least one duct (col. 3, lines 59 through 61).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 3671

9. Claims 123 through 127, 138, 162, and 163 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylin (U.S. Patent No. 4,896,997) in view of Rivard (U.S. Patent No. 4,812,078).

Gaylin '997, as seen in Fig. 5, discloses a fiber optic installation (col. 1, lines 6 through 13) comprising:

a surface (13) defining a channel (85);

a cable (30) disposed within the channel, said cable comprising a tube (24) sized to fit within the channel and at least one optical waveguide (26) disposed within said tube (col. 4, lines 6 through 13); and

a filling material overlying said cable and at least partially filling the channel (col. 4, lines 50 through 52).

Gaylin '997 teaches all of the features of the claimed invention with the exception(s) of:  
with regard to claims 123 and 162, the channel having a width of no more than 12 mm;  
with regard to claim 123, the filling material at least partially comprised of material not previously evacuated to form the channel;

with regard to claim 124, the cable having a diameter of no more than 10 mm;

with regard to claims 125 and 163, the channel having a width of no more than 7 mm;

with regard to claim 126, the cable having a diameter of no more than 5.5 mm;

with regard to claim 127, the channel having a depth of no more than 15 mm; and

with regard to claim 138, the filling material including a marker.

Rivard '078 shows, in Fig. 1, a cable installation comprising:

a cable (6) disposed within a channel (18); and

a filling material (41) overlying said cable and at least partially filling the channel, said filling material at least partially comprised of material not previously evacuated to form the channel (col. 5, line 66 through col. 6, line 2);

wherein the filling material includes a marker (55).

With regard to claims 123 and 162, the recitation of the width of the channel being no more than 12 mm has not been given patentable weight because Applicants do not disclose criticality or properly establish unexpected results for the claimed range.

With regard to claim 123, it would have been obvious to one of ordinary skill in the art of cable laying at the time of invention to modify the installation shown by Gaylin '997 such that it would include filling material as taught by Rivard '078. The motivation would have been to protect the cable from damage caused by rocks and other objects in the ground.

With regard to claims 124 and 126, the recitation of the diameter of the cable being no more than 10 mm, more specifically, no more than 5.5 mm, has not been given patentable weight because Applicants do not disclose criticality or properly establish unexpected results for the claimed range.

With regard to claims 125 and 163, the recitation of the channel having a width of no more than 7 mm has not been given patentable weight because Applicants do not disclose criticality or properly establish unexpected results for the claimed range.



Art Unit: 3671

With regard to claim 127, the recitation of the channel having a depth of no more than 15 mm has not been given patentable weight because Applicants do not disclose criticality or properly establish unexpected results for the claimed range.

With regard to claim 138, it would have been obvious to one of ordinary skill in the art of cable laying at the time of invention to modify the installation shown by Gaylin '997 such that the filling material would include a marker as taught by Rivard '078. The motivation would have been to provide indicia alerting any future excavators.

10. Claims 128 and 130 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylin (U.S. Patent No. 4,896,997) in view of Rivard (U.S. Patent No. 4,812,078) as applied to claim 123 above, and further in view of Halstead (U.S. Patent No. 4,006,315).

Gaylin '997 in view of Rivard '078 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claim 128, the surface comprising a road surface; and

with regard to claim 130, said surface comprising a paved surface defining at least one expansion joint which serves as the channel.

Halstead '315, as seen in Fig. 16A, shows a cable (25) positioned in an expansion joint (13F) of a paved road surface (13A).

Art Unit: 3671

With regard to claims 128 and 130, it would have been obvious to one of ordinary skill in the art of cable laying at the time of invention to modify the surface of the installation disclosed by Gaylin '997 and Rivard '078 such that the surface would comprise a paved road surface defining at least one expansion joint to serve as the channel. The motivation would have been ease of installation as the cable path would be predetermined.

11. Claim 164 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylin (U.S. Patent No. 4,896,997) in view of Shoffner (U.S. Patent No. 4,892,442).

Gaylin '997 discloses all of the features of the claimed invention with the exception(s) of:

said elongate body comprising a plurality of barbs for engaging walls that define the channel.

Shoffner '442 discloses, as seen in Figs. 1, 3, and 4:

an elongate body defining at least one lengthwise extending duct (16); and  
at least one optical waveguide (14) disposed within a respective duct defined said elongate body;

wherein said elongate body comprises a plurality of barbs (22) for enhancing the structural integrity of the device (col. 4, lines 34 through 50).

Art Unit: 3671

It would have been obvious to one of ordinary skill in the art of conduits at the time of invention to modify the construction of the elongate body shown by Gaylin '997 such that it would include barbs as taught by Shoffner '442. The motivation would have been to enhance the structural integrity of the elongate body.

*Allowable Subject Matter*

12. Claims 144 through 160 are allowed.

13. Claim 168 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 129, 131 through 137, 139 through 143, and 167 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

15. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

• Art Unit: 3671


*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 703-305-3019. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703-308-3870. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-3795 for regular communications and 703-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

TLM  
29 July 2002

  
THOMAS B. WILL  
SUPERVISORY PATENT EXAMINER  
GROUP 3600